

Some basic chemistry

1. The electronic structure of an atom describes how its electrons are arranged according to their:
 - energy
 - mass
 - size
 - charge
2. All carbon atoms have:
 - one more neutron than protons
 - the same mass
 - identical nuclei
 - the same number of protons
3. The most abundant (% by mass) element in the human body is:
 - nitrogen
 - oxygen
 - hydrogen
 - carbon
4. Nitrogen atoms can form:
 - 3 bonds
 - 4 bonds
 - 1 bond
 - 2 bonds
5. The empirical formula of a compound shows:
 - the shape of a molecule of the compound
 - how the atoms in a molecule of the compound are bonded to one another
 - the ratio of atoms in a molecule of the compound
 - how many atoms there are in a molecule of the compound
6. Potassium atoms have the electron arrangement 2,8,8,1. They combine with chlorine atoms to make the ionic compound potassium chloride, KCl. How many electrons are in a potassium ion?
 - 21
 - 20
 - 19
 - 18
7. How many covalent bonds are there in each molecule of ethane?
 - 7
 - 6
 - 5
 - 4
8. The spatial arrangement of atoms in a molecule are shown by a compound's
 - structural formula
 - molecular formula
 - 3-D displayed formula
 - empirical formula